



State of Utah

Department of
Environmental Quality

Richard W. Sprott
Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQ-049-08

MEMORANDUM

TO: Air Quality Board

THROUGH: Cheryl Heying, Executive Secretary

FROM: Mat Carlile, Environmental Planning Consultant

DATE: August 6, 2008

SUBJECT: FINAL ADOPTION: Amend R307-302-3 No-Burn Periods for Fine Particulate

On May 7, 2008, the Air Quality Board proposed for comment amendments to R307-302-3, No-Burn Periods for Fine Particulate. R307-302-3 was proposed for comment to update the rule to be consistent with the new NAAQS. R307-302-3 establishes a trigger to call a mandatory no-burn period for residential solid fuel burning devices and fireplaces. This rule applies in all of Salt Lake and Davis Counties, and in portions of Utah and Weber Counties. On September 21, 2006, EPA promulgated revisions to the National Ambient Air Quality Standards for PM_{2.5}, wherein the 24-hour PM_{2.5} standard was lowered from 65 µg/m³ to 35 µg/m³.

No oral or written comments were received about this proposal.

Staff Recommendation: Staff recommends that R307-302-3 be adopted as proposed.

R307. Environmental Quality, Air Quality.**R307-302. Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.****R307-302-3. No-Burn Periods for Fine Particulate.**

(1) Sole source of residential heating.

(a) Previously registered sole source residential solid fuel burning devices in areas described in (i), (ii), and (iii) below must continue to be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below. No new registrations will be accepted in these areas.

(i) Areas of Utah County north of the southernmost border of Payson City and east of State Route 68,

(ii) all of Salt Lake County, and

(iii) areas in Davis County that are south of the southernmost border of Kaysville.

(b) By November 1, 2006, all sole source residential solid fuels burning devices in Weber County west of the Wasatch Mountain Range and areas north of the southernmost border of Kaysville must be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below.

(2) When the ambient concentration of PM10 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 120 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring site registering the 120 micrograms per cubic meter concentration. Residents of the affected areas shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

(3) PM10 Contingency Plan. If the PM10 Contingency Plan described in Section IX, Part A, of the state implementation plan has been implemented, the following actions will be implemented immediately:

(a) The trigger level for no-burn periods as specified in (2) above will be 110 micrograms per cubic meter for that area where the PM10 Contingency Plan has been implemented; and

(b) In the regions of Utah County north of the southernmost border of Payson City and east of State Route 68, Salt Lake County, Davis County, and all regions of Weber County west of the Wasatch Mountain Range, it shall be unlawful to sell or install for use as a solid fuel burning device any used solid fuel burning device that is not approved by the Environmental Protection Agency.

(4) When the ambient concentration of PM2.5 measured by

monitors in Salt Lake, Davis, Weber, or Utah Counties are forecasted to reach or exceed the PM2.5 NAAQS, the executive secretary will issue a public announcement to provide broad notification that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those counties identified by the executive secretary. Residents of Salt Lake County, Davis County, or the affected areas of Utah and Weber Counties shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

KEY: air pollution, woodburning, fireplaces, stoves

Date of Enactment or Last Substantive Amendment: 2008

Notice of Continuation: September 7, 2005

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104

(b) a signed statement by an Automotive Service Excellence (ASE) certified technician that includes the vehicle identification number (VIN) and states that the vehicle is an OEM vehicle;

(2) An original or copy of the purchase order, customer invoice, or receipt including the VIN; and

(3) A copy of the current Utah vehicle registration.

R307-123-4. Demonstration of Eligibility for Vehicles Converted to Clean Fuels.

To demonstrate that a conversion of a motor vehicle fueled by clean fuel is eligible, proof of purchase shall be made by submitting the following documentation to the executive secretary:

(1) the VIN;

(2) the fuel type before conversion;

(3) the fuel type after conversion;

(4)(a) If within a county with an inspection and maintenance (I/M) program, a copy of the vehicle inspection report from an approved station showing that the converted clean fuel vehicle meets all county emissions requirements for all installed fuel systems; or

(b) a signed statement by an ASE certified technician that includes the VIN and states that the conversion is functional;

(5) each of the following:

(a) the conversion equipment manufacturer;

(b) the conversion equipment model number;

(c) the date of the conversion; and

(d) the name, address, and phone number of the person that converted the vehicle;

(6) proof that the conversion is certified by the Board;

(7) an original or copy of the purchase order, customer invoice, or receipt; and

(8) a copy of the current Utah vehicle registration.

R307-123-5. Demonstration of Eligibility for Retrofitted Vehicles.

To demonstrate that a retrofit of a motor vehicle is eligible, proof of purchase shall be made by submitting the following documentation to the executive secretary:

(1) the VIN;

(2) each of the following:

(a) the retrofit equipment manufacturer;

(b) the retrofit equipment model number;

(c) the date of the retrofit; and

(d) the name, address, and phone number of the person that retrofitted the vehicle;

(5) proof that the retrofit is certified by the Board;

(6) an original or copy of the purchase order, customer invoice, or receipt; and

(7) a copy of the current Utah vehicle registration.

KEY: air pollution, alternative fuels, grants and loans, motor vehicles

Date of Enactment or Last Substantive Amendment: 2008

Authorizing, and Implemented or Interpreted Law: 19-2-104; 19-1-401; 59-7-605; 59-10-1009

NOTICE OF PROPOSED RULE

(Amendment)

DAR File No.: 31388

Filed: 05/07/2008, 15:22

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: On 09/21/2006, the Environmental Protection Agency (EPA) promulgated revisions to the National Ambient Air Quality Standards (NAAQS) for PM2.5. At that time, EPA strengthened the 24-hour PM2.5 standard from the 1997 level of 65 micrograms per cubic meter to 35 micrograms per cubic meter. Because of this new standard, the trigger for calling a mandatory no-burn period is above the current NAAQS. Therefore, this proposal updates the rule to reflect the new NAAQS. Rather than specifying a specific PM2.5 concentration, the revised rule will trigger a no-burn period when Utah Division of Air Quality (UDAQ) forecasts an exceedance of the NAAQS.

SUMMARY OF THE RULE OR CHANGE: Section R307-302-3 establishes a trigger to call a mandatory no-burn period for residential solid fuel burning devices and fireplaces. This rule applies in all of Salt Lake and Davis Counties, and in portions of Utah and Weber Counties. Under the current version of Section R307-302-3, a mandatory no-burn period is triggered when the ambient concentration of PM2.5 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 52 micrograms per cubic meter, which is 80% of the 1997 PM2.5 NAAQS. On 09/21/2006, EPA promulgated revisions to the NAAQS for PM2.5, wherein the 24-hour PM2.5 standard was lowered from 65 micrograms per cubic meter to 35 micrograms per cubic meter. Because of this new standard, the trigger for calling a mandatory no-burn period contained in Section R307-302-3 is above the current NAAQS. Therefore, the Utah Air Quality Board is proposing to update the rule to be consistent with the new NAAQS. The Board is proposing that the revised rule language will trigger a no-burn period when UDAQ forecasts an exceedance of the NAAQS, rather than specifying a specific PM2.5 concentration. The Air Monitoring Center has used the new PM2.5 NAAQS to call the no-burn period since 2006, resulting in approximately 10 more no-burn days per season than in previous winters. The proposed change will not result in any more no-burn days, but it will allow UDAQ to enforce all of the mandatory no-burn days. However, UDAQ did not enforce the no-burn period until the ambient PM2.5 levels were above 52 micrograms per cubic meter, because the rule had not been changed to reflect the lowered standard. The proposed change will not result in any more no-burn days, but it will allow UDAQ to enforce all of the mandatory no-burn days.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-2-104

ANTICIPATED COST OR SAVINGS TO:

❖ THE STATE BUDGET: No change in cost because existing staff will perform smoke patrol duties.

❖ LOCAL GOVERNMENTS: No change in costs because only residences are affected.

Environmental Quality, Air Quality
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❖ **SMALL BUSINESSES AND PERSONS OTHER THAN BUSINESSES:** Small Businesses: No change in costs because only residences are affected. Other Persons: UDAQ does not know how many residences in the three counties are heated with wood to save money. Therefore it is not possible to determine the total cost. Individual costs are outlined under "compliance costs for affected persons."

COMPLIANCE COSTS FOR AFFECTED PERSONS: This rule applies in all of Salt Lake and Davis Counties, and in portions of Utah and Weber Counties to residences for which a fireplace or stove is NOT the sole source of heating. In addition, wood stoves installed in the last 20 years are required to be EPA-certified, and can be used with no visible emissions; when they are properly operated, they would not be subject to the ban. Fireplaces are primarily used for recreational purposes or atmosphere rather than home heating so curtailment is not anticipated to create additional costs for home heating. Wood stoves, however, generally supplement other heating devices; curtailing their use may cause increased costs for other heat sources. The maximum cost would be incurred by a resident who is able to obtain wood free and in no-burn periods must switch to another fuel source. The cost for natural gas could be as much as \$6 per day for a home that could otherwise reasonably be heated with wood. If there were as many as 10 no-burn days in a winter season, the annual cost increase could be \$60.

COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES: This rule affects only residential fireplaces and stoves; there is no cost to businesses. Richard W. Sprott, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY
AIR QUALITY
150 N 1950 W
SALT LAKE CITY UT 84116-3085, or
at the Division of Administrative Rules.

DIRECT QUESTIONS REGARDING THIS RULE TO:

Mat E. Carlile at the above address, by phone at 801-536-4136, by FAX at 801-536-0085, or by Internet E-mail at MCARLILE@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 07/01/2008.

THIS RULE MAY BECOME EFFECTIVE ON: 08/03/2008

AUTHORIZED BY: Bryce Bird, Planning Branch Manager

R307. Environmental Quality, Air Quality.

R307-302. Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.

R307-302-3. No-Burn Periods for Fine Particulate.

(1) Sole source of residential heating.

(a) Previously registered sole source residential solid fuel burning devices in areas described in (i),(ii),and(iii) below must continue to be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below. No new registrations will be accepted in these areas.

(i) Areas of Utah County north of the southernmost border of Payson City and east of State Route 68,

(ii) all of Salt Lake County, and

(iii) areas in Davis County that are south of the southernmost border of Kaysville.

(b) By November 1, 2006, all sole source residential solid fuels burning devices in Weber County west of the Wasatch Mountain Range and areas north of the southernmost border of Kaysville must be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below.

(2) When the ambient concentration of PM10 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 120 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring site registering the 120 micrograms per cubic meter concentration. Residents of the affected areas shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

(3) PM10 Contingency Plan. If the PM10 Contingency Plan described in Section IX, Part A, of the state implementation plan has been implemented, the following actions will be implemented immediately:

(a) The trigger level for no-burn periods as specified in (2) above will be 110 micrograms per cubic meter for that area where the PM10 Contingency Plan has been implemented; and

(b) In the regions of Utah County north of the southernmost border of Payson City and east of State Route 68, Salt Lake County, Davis County, and all regions of Weber County west of the Wasatch Mountain Range, it shall be unlawful to sell or install for use as a solid fuel burning device any used solid fuel burning device that is not approved by the Environmental Protection Agency.

(4) When the ambient concentration of PM2.5 measured by [the] monitors in Salt Lake, Davis, Weber, or Utah Counties [~~reaches the level of 52 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours~~] are forecasted to reach or exceed the PM2.5 NAAQS, the executive secretary will issue a public announcement ~~to provide broad notification[and will distribute such announcement to the local media notifying the public]~~ that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those ~~[areas or] counties identified by the executive secretary[impacting the real-time monitoring site registering the 52 micrograms per cubic meter~~

concentration]. Residents of Salt Lake County, Davis County, or the affected areas of Utah and Weber Counties shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

KEY: air pollution, woodburning, fireplaces, stoves

Date of Enactment or Last Substantive Amendment: [September 2, 2005] 2008

Notice of Continuation: September 7, 2005

Authorizing, and Implemented or Interpreted Law: 19-2-101; 19-2-104

Environmental Quality, Air Quality

R307-328

Ozone Nonattainment and Maintenance Areas and Utah and Weber Counties: Gasoline Transfer and Storage

NOTICE OF PROPOSED RULE (Amendment)

DAR File No.: 31392

FILED: 05/07/2008, 15:32

RULE ANALYSIS

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of this amendment is to extend Stage I vapor recovery requirements to all counties within the State of Utah.

SUMMARY OF THE RULE OR CHANGE: Stage I vapor recovery systems collect vapors resulting from the dispensing of gasoline to underground storage tanks. Stage I vapor recovery requirements were implemented in Salt Lake and Davis Counties in the 1980s and in Utah and Weber Counties in 1999. They have proven to be a successful method of controlling both volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions along the Wasatch Front. Based on 2005 data, it is estimated that approximately 3,595 tons of VOC and 282 tons of HAP have been prevented from entering the atmosphere along the Wasatch Front annually by implementation of Stage I vapor recovery systems. A growing information base indicates that the emission of ozone precursors and the subsequent formation of ozone is no longer an issue only along the Wasatch Front, but is a concern across a broad expanse of the intermountain west, including most of rural Utah. It is estimated that over 2,000 tons of VOC and HAP emissions could be eliminated annually if Stage I controls were implemented statewide. With the recent tightening of the National Ambient Air Quality Standard (NAAQS) for ozone, the Air Quality Board is proposing to expand the Stage I vapor recovery requirements throughout the State of Utah. Rules R307-342 and R307-328 work together to establish the Stage I vapor recovery requirements. Rule R307-328 requires gasoline transport vehicles and the bulk plants and service stations that receive

gasoline from them to capture vapors released during transfer operations. Rule R307-342 requires that gasoline delivery equipment provide leak-tight loading and off-loading, and specifies procedures by which contractors may become certified to perform leak tightness tests. The Board is proposing a phase in compliance schedule so that larger commercially run companies with large numbers of stations could schedule the implementation of Stage I modifications. In addition, this phase-in process would allow smaller private facilities the opportunity to save for the up-front capital costs. The proposal allows for facilities to request two six-month extensions. However, all facilities must be in compliance with this rule not later than 04/30/2011.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Subsection 19-2-104(1)(a)

ANTICIPATED COST OR SAVINGS TO:

❖ **THE STATE BUDGET:** There are approximately 129 tanks that are all part of the State Fuel Network that include Utah Department of Transportation facilities, school districts, universities, correctional facilities, and maintenance facilities. Total cost to modify these underground storage tanks will be approximately \$96,750.

❖ **LOCAL GOVERNMENTS:** Approximately 6 local governments maintain approximately 16 underground gasoline storage tanks. Vapor recovery modification to these tanks will cost approximately \$750 per tank for a total of \$12,000.

❖ **SMALL BUSINESSES AND PERSONS OTHER THAN BUSINESSES:**
Small Businesses: It is estimated that approximately 400 underground storage tanks (UST) are operated by small business owners. Individual costs are estimated to be run between approximately \$750 to \$5,000 per tank modification, depending on type of modification and the amount of labor involved to modify each tank. It is estimated that 22% of the small business USTs are older than 20 years and would require more labor and equipment to modify the tanks. Estimated total cost for small businesses would be approximately \$676,000. **Other Persons:** There may be some additional costs for tank trucks modifications. These are estimated to be approximately \$320 per truck modification. It is impossible to estimate how many trucks will need to be modified. However, it is believed that nearly all tank trucks operating in Utah are already equipped with Stage I technology. No costs are anticipated to other persons not affiliated with gasoline delivery or dispensing facilities.

COMPLIANCE COSTS FOR AFFECTED PERSONS: Individual costs are estimated to be run between approximately \$750 and \$5,000 per tank modification, depending on type of modification and the amount of labor involved to modify each tank. The cost for each bulk plant modification will be approximately \$750 per delivery station. However, the Division of Air Quality does not have through-put data on any of these rural bulk plants, but believes that several of them have through-puts less than 3,900 gallons per 30-day running period. This would exempt them from Stage I technology requirements. The cost for each delivery truck is approximately \$320, but most trucks already are equipped.